Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of:	)	
	)	
Section 68.4 of the Commission's Rules	)	
Governing Hearing Aid-Compatible	)	WT Docket No. 01-309
Telephones	)	RM-8658
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The Reply Comments of
The Alexander Graham Bell Association for the Deaf and Hard of Hearing

The Alexander Graham Bell Association for the Deaf and Hard of Hearing (AG Bell) is pleased to offer the following in reply to comments made in response to the Notice of Proposed Rulemaking concerning the removal of the exemption for digital wireless telephones from the Federal Communications Commission's Regulations on Hearing Aid Compatibility.

Our reply will address three elements of particular importance that were presented in comments on this NPRM:

- ·We applaud the universal support for access to digital wireless telephone service for consumers who are deaf and hard of hearing.
- ·We dispute the contentions of members of the wireless industry regarding solutions to the accessibility problem.
- ·We support the plan for achieving access proposed by RERCTA except with regard to their proposed timetable for achieving access.

I. All commentators believe that consumers who are deaf and hard of hearing should be able to use digital wireless telephones.

AG Bell and its members were very pleased that all of the comments submitted in this

Rulemaking expressed support for the importance of access to digital wireless phones for all consumers, including those who rely on hearing aids or cochlear implants. Many of the comments came from organizations like AG Bell which provide support for individuals who are deaf and hard of hearing.[1] Others came from individuals who are deaf or hard of hearing and have had difficulty obtaining usable digital wireless telephone service.[2] We enthusiastically support the call for access presented in these comments.

We were also pleased to find that in addition to the expressions of support from people who are deaf and hard of hearing, as well as organizations that support their interests, and we were gratified to perceive that there seemed to be a consensus among members of the wireless industry that all consumers, including those who rely upon hearing aids and cochlear implants, deserve to have access to their products. We were particularly pleased with the statement of the Telecommunications Industry Association (TIA) that its members "...believe in the critical importance of hearing aid users having the ability to enjoy the use of modern essential communications tools such as cell phones"[3]

[1]See e.g. Comments of Self Help for Hard of Hearing People, National Association of the Deaf, Telecommunications for Deaf Inc., etc..
[2]See e.g. Comments of Jon Taylor, Curtis F. Dickenson, John B. Klein, etc..
[3]Telecommunications Industry Association Comments p. 1.

AG Bell believes that the Commission should consider all of these statements in light of the statutory requirement for removing the exemption. We believe that the universal support for the need for access obviates the first two steps of the required test. Given the universal contention that people who rely on hearing aids and cochlear implants should have access to their technology, we assert that the Commission must conclude that the removal of the exemption is in the public interest, and that its retention would cause harm to consumers who are deaf and hard of hearing.[4]

II. AG Bell disagrees with three assertions common to the comments of members of the digital wireless industry.

A review of the comments submitted in response to this Notice of Proposed Rulemaking (NPRM) shows that those who oppose removing the exemption do so for three primary reasons:

- They state that it is not possible to produce accessible digital wireless phones[5]
- They assert that voluntary efforts will give consumers who are deaf and hard of hearing adequate access to digital wireless phones.[6]
- They assert that hearing aid and cochlear implant manufacturers must play the primary role in assuring accessibility.[7]

AG Bell believes that because these three assertions are incorrect and unsubstantiated in the

[4] 47 U.S.C. §610(b)(2)(C)(i)-(ii), 47 C.F.R. §68.4(a)(4)(i)-(ii)

[5] See e.g. Cingular Wireless LLC , Comments pp. 3-6, AT&T Wireless Services Inc. Comments p. 1, Matsushita Electric Corporation of America Comments pp. 6-8, etc.

[6] Id.

[7] Id.

record, the Commission will find that it is technically feasible to produce accessible phones, and must therefore remove or limit the exemption.

A. The assertion that it is not technically feasible to produce accessible phones is unsubstantiated.

The comments of Cingular Wireless LLC (Cingular) present legal argument relying upon the standard established in *Citizens to Preserve Overton Park v. Volpe*, 401 US 402 (1971) as a basis for the assertion that the Commission must base its findings of technological feasibility on information found in the record.[8] AG Bell agrees that since *Volpe,* an administrative agency must have a reasonable basis for its Rulemaking decisions, and that basis must reflect the information on the record. However, we believe that by adhering to the *Volpe* standard for administrative decision making the Commission will come to a different conclusion. AG Bell believes that the only reasonable conclusion that can be drawn from the record is that accessible phones are technologically feasible.

The comments of Wireless AT&T Wireless Services, Inc. (AWS), Cingular (Cingular), Sprint PCS (Sprint), and Matsusita Electric Corporation of America (MECA) all assert that such phones are not feasible. However, none of these comments offer any factual support for this assertion. All four comments base their statements on the fact that digital wireless phones are radio transmitters and to function as such must emit radio frequency which may affect the circuitry in a hearing aid, causing interference. None of the comments present any documentation of the companies' efforts to engineer solutions to address this obvious problem. Not only do they not present the results of testing potential solutions such as adding shielding to the phone, or

reconfiguring the antenna, they do not even state that they have tried any potential solutions.

AG Bell makes no claims of technological expertise. We do not possess the resources to perform the engineering tests that might show that these modifications are effective. We are, however, capable of observing the record, and we believe that based on this record, a reasonable observer would conclude that such phones are technologically feasible. The record includes the anecdotal evidence of many individuals who have found digital wireless handsets and service which are useable with their hearing technology. The American National Standards Institute provides even stronger support:

[8]Cingular p. 4.

> Although there are certain hearing aids that still do not work with any wireless telephones, of the telephone-hearing aid combinations that did provide access, users were able to obtain 95% word recognition with little or no hearing aid interference.[9]

Also, the comments of AAES cite an Oklahoma State University study that showed that "In fact 68% of the hearing aid / mobile telephone combinations performed at recommended levels."[10] Further, the Comments of Dana Mulvaney include statements from one manufacturer, Samsung, that telecoil capacity is currently being built into at least some of its handsets.[11] The industry itself supports the proposition that there are accessible phones in the comments of its members on this Rulemaking. Finally, CTIA advises "If you use a telecoil-equipped hearing aid, you can make the choice among wireless phones which have built in t-coil coupling capability"[12]; advice that plainly acknowledges the existence of accessible phones.

Based on this record, AG Bell believes that it would be unreasonable for the Commission to find that such phones are not feasible. Cingular's argument that "impossible requirements imposed by an agency are perforce unreasonable"[13] falls in the face of the demonstrated existence of useable phones.

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[9]American National Standards Institute Accredited Standards Committee 63 (ANSI ASC C63) for ElectroMagnetic Compatibility (EMC) Subcommittee 8 (Medical Devices) Comments p.7.
[10]AAES Comments p. 13.
[11]Mulvaney, Dana reply comments p. 1.
[12]http://www.wow-com.com/consumer/access_wireless/articles.cfm?ID=372&SearchSection=&SearchCriteria=hearing%20aid
[13]Cingular, p. 3, quoting *Alliance for Cannabis Therapeutics v. DEA* 903 F2d. 936 at 940.

We add that, even if the Commission were to conclude that accessible phones are not currently possible, that does not mean that they are not feasible. Prior to1876, it was not possible to convey a human voice further than a person could yell. At that time, there was no possibility of two people in separate parts of the country having a conversation. Today, of course such conversations are so commonplace as to scarcely be noticed. What had been impossible for all history is now routine.

AG Bell believes that the situations are analogous. In 1875, telephone service over long distances was impossible, not because of any immutable scientific law, but only because Alexander Graham Bell had not yet developed the telephone. We believe the record in this Rulemaking demonstrates the same situation exists for accessible digital wireless phones. Wireless phones are unavailable to consumers who are deaf and hard of hearing not because they are infeasible, but simply because the industry has done little to develop and market them.

B. Relying on voluntary efforts will not ensure access for consumers who are deaf and hard of hearing.

Comments of CTIA refer to an "unwavering effort" on the part of the wireless industry to provide useable phones.[14] TIA adds "TIA member companies continue to introduce a wide variety of innovative products and service features that play a role in facilitating such access."[15] AG Bell appreciates any effort to help hearing aid and cochlear implant users to obtain accessible phones, however, the record of this proceeding is clear that this voluntary exertion is

[14]CTIA p.2
[15]TIA p. 1.

not enough.

Two facts convince us that FCC action is needed if this process is to succeed. First, is the simple fact that today, nearly seven years after the HAC Summit, consumers who are deaf and hard of hearing do not have appropriate access to this technology. The Summit, resulting from the previous round of Rulemaking in 1986, produced a commitment by CTIA's President, Thomas Wheeler, to try to provide access within two years. Despite this offer, the voluntary efforts more than six years have failed to ensure access. Clearly, greater incentive is needed.

Second, many of the comments in response to this NPRM noted that people who are deaf and hard of hearing could use a number of peripheral devices that may give them access to wireless communications. As several consumers noted, these devices are expensive, generally costing more than the handsets themselves. They are often cumbersome, difficult to attach, and unreliable. Also, unlike the "hands free" devices that have become ubiquitous in cars and on the streets, these devices require additional batteries in order to function.

We are convinced that a system which provides access only through such accessories serves to single out the consumer who is deaf or hard of hearing, and does not provide the access anticipated by the HAC Act. However, even if these stopgap measures were acceptable, it would leave an often greater problem which is under the sole control of the wireless industry. Beyond their expense and inconvenience, accessories and other stopgaps are of little use to the consumer who is deaf or hard of hearing because they are generally unavailable. Very few retail outlets, except those representing AT&T, have devices like the neckloop available and in stock. Worse,

very few sales people are even aware that such devices exist, and can be bought, and some wireless carriers do not even offer handsets that can be used with these devices.

C The issue of making hearing aids more resistant to interference is inappropriate in this Rulemaking.

The comments of Sprint, CTIA, MECA, and TIA include extensive discussions of the need for improved RF immunity in hearing aids. They assert that the usability problems should be addressed by modifying hearing aids rather than wireless phones. AG Bell believes that these comments are not only irrelevant to this Rulemaking, they offer a largely impractical solution which attempts to shift the responsibility for achieving access required under the HAC statute to those least able to sustain it.

These four Comments suggest that the Commission should not eliminate the exemption for digital wireless telephones because the problems are caused by the interaction between the handset and a hearing aid. They assert that modifications to the hearing aids and cochlear implants would eliminate the problem making the HAC requirement moot. This argument ignores two important factors. First, there is nothing in the HAC statutory language allowing the Commission to shift the responsibility for ensuring access to parties outside of its purview. Second, the Commission has no control over the design of hearing aids, and so cannot exercise its directive to assure access by pursuing this approach.

AG Bell agrees that the best hope for achieving access lies in a cooperative effort by all of the parties. We strongly encourage the wireless industry and the manufacturers of hearing aids and cochlear implants to work together to ensure that their mutual customers can use both of their

products. We are happy to do everything in our power to assist this process.
However, although this effort will undoubtedly be an important part of the solution to this problem, it is outside of the charge of the HAC Act. Therefore, the discussion of this approach cannot be a factor in the Commission's decision to eliminate the exemption. The statutory language of the HAC Act requires the Commission to determine if such a revocation or limitation of the exemption meets the four part test in subsection (b)(2)(C). If it finds that the revocation meets these conditions, the Commission "shall revoke or otherwise limit such exemption." There is nothing in the language of the statute which directs the Commission to consider the design of hearing aids, nor is there any direction to consult with other agencies such as the Food and Drug Administration before taking action.

Our work with hearing aid and cochlear implant manufacturers has convinced us that they are continuing to take significant steps toward making their products less susceptible to problems caused by interaction with digital wireless phones. Many new models of hearing aids have been hardened against radio frequency signals and extraneous electromagnetic emissions. We believe that the hearing technology industry is very open to taking the suggestions offered in these comments and using them to produce improved products. However, none of this should serve to absolve the wireless industry from its duty to address the problems of people who rely on hearing aids and cochlear implants.

Further, we believe that the discussion of inexpensive modifications to hearing aid design obscures the fact that this is not a practical solution for hearing aid users. Many modern hearing

aids can cost as much as $5000, and cochlear implants can cost as much as $20,000. Although, the modifications suggested by TIA and MECA would not significantly affect the cost of these devices it ignores the fact that in order to benefit from these improvements, the consumer who is deaf or hard of hearing would need to buy a new hearing aid. To suggest that the solution to the accessibility problem lies in forcing individuals to make investments of this magnitude is not remotely practical. Consumers simply do not have the resources to replace such expensive technology.

III. The Commission must impose a timetable for the revocation of the exemption

AG Bell believes that the Rehabilitation Engineering Research Center on Telecommunications Access (RERCTA) presented an eminently practical strategy for the implementation of accessibility in the wireless industry. We support RERCTA's proposal, except with regard to the length of time needed for full implementation.

All of the comments submitted in regard to this NPRM called for a cooperative effort to ensure accessibility. We believe that the Commission should allow a reasonable time for the industry to work with all stakeholders. We believe, however, that the timetable proposed by the RERCTA, calling for full compliance by July 1, 2006, will impose too great a hardship on people who are deaf and hard of hearing. In April 1996, Thomas Wheeler, president of CTIA, offered a proposed work plan for achieving access. This plan called for an effort to produce commercial availability of accessible phones after twenty months. AG Bell believes that this indicates a two-year implementation period will provide adequate time for the stakeholders to work together to provide an appropriate solution to this problem.

IV Conclusion

AG Bell believes that the record in this NPRM provides an appropriate basis for the Commission to remove the exemption from the HAC requirements for digital wireless phones. We do not believe that the Comments of the members of the wireless industry provide an adequate basis to conclude that such phones are not feasible. On the contrary, we believe that the concrete facts presented by consumers and organization clearly demonstrate that such phones are feasible, and in some cases may be commercially available. We believe that the Commission has the authority to revoke or limit the exemption, and to direct a cooperative effort toward achieving full accessability within two years. We stand ready to assist in making this a reality.

Respectfully submitted,

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for the Deaf and Hard of Hearing